

WHAT IS CLAIMED IS:

1 1. A method for optimal routing of a call in a Base
2 Station System, comprising the steps of:

3 sending a message to said Base Station System, said message
4 including information associated with a plurality of ports in an
5 IP network;

6 ordering a first base transceiver station to send at least
7 a first packet associated with said call to a second base
8 transceiver station via at least a first port of said plurality
9 of ports in said IP network; and

10 ordering said second base transceiver station to send at
11 least a second packet associated with said call to said first
12 base transceiver station via at least a second port of said
13 plurality of ports in said IP network.

14 2. The method of Claim 1, further comprising the step of:

1 suspending a transfer of packets associated with said call
2 from a gateway to said first base transceiver station and said
3 second base transceiver station.

4 3. The method of Claim 1, wherein said message comprises
5 a Join CIC message.

6 4. The method of Claim 1, wherein said message includes
7 at least Circuit Identity Code information or Signalling
8 Connection information.

9 5. The method of Claim 1, wherein the steps are performed
10 for a handover procedure for at least said first base
11 transceiver station or said second base transceiver station.

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1 6. A method for optimal routing of a call in a Base
2 Station System, comprising the steps of:

3 sending a message to said Base Station System, said message
4 including restoration information associated with a plurality of
5 ports in an IP network; and

6 restoring a transfer of packets associated with said call
7 from a gateway to a first base transceiver station and a second
8 base transceiver station via at least a first port and second
9 port of said plurality of ports in said IP network.

10 7. The method of Claim 6, wherein said restoration
11 information comprises Restore CIC information.

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1 8. A system for optimal routing of a call in a Base
2 Station System, comprising:
3 an IP network including a plurality of ports;
4 a gateway coupled to said IP network via at least one port
5 of said plurality of ports;
6 a mobile switching center coupled to said gateway;
7 a radio network server;
8 a first base transceiver station coupled to said radio
9 network server, and to said IP network at a first port of said
10 plurality of ports;
11 a second base transceiver station coupled to said radio
12 network server, and to said IP network at a second port of said
13 plurality of ports, said mobile switching center operable to:
14 send a message to said Base Station System, said message
15 including information associated with at least one port of said
16 plurality of ports in said IP network;
17 said radio network server operable to:

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1 order said first base transceiver station to send at least
2 a first packet associated with said call to said second base
3 transceiver station via at least a first port of said plurality
4 of ports in said IP network; and

5 order said second base transceiver station to send at least
6 a second packet associated with said call to said first base
7 transceiver station via at least a second port of said plurality
8 of ports in said IP network.

9 9. The system of Claim 8, wherein said radio network
10 server is further operable to:

11 suspend a transfer of packets associated with said call
12 from a gateway to said first base transceiver station and said
13 second base transceiver station.

14 10. The system of Claim 8, wherein said message comprises
15 a Join CIC message.

1 11. The system of Claim 8, wherein said message includes
2 at least Circuit Identity Code information or Signalling
3 Connection information.

4 12. The system of Claim 8, wherein at least one of said
5 first base transceiver station or said second base transceiver
6 station performs a handover procedure.

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13. A system for optimal routing of a call in a Base Station System, comprising:

- an IP network including a plurality of ports;
- a gateway coupled to said IP network;
- a mobile switching center coupled to said gateway;
- a radio network server;
- a first base transceiver station coupled to said radio network server, and to said IP network at a first port of said plurality of ports;
- a second base transceiver station coupled to said radio network server, and to said IP network at a second port of said plurality of ports, said mobile switching center operable to:
 - send a message to said Base Station System, said message including restoration information associated with at least one port of said plurality of ports in said IP network;
 - said radio network server operable to:

1 restore a transfer of packets associated with said call
2 from said gateway to said first base transceiver station and
3 said second base transceiver station.

4 14. The system of Claim 13, wherein said restoration
5 information comprises Restore CIC information.

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